Remarks/Arguments

A. Status of the Claims

Claims 1-5 and 30 have been amended; claims 10-22 and 31-34 are withdrawn from consideration as being drawn to a non-elected invention; and claims 26-29 are withdrawn from consideration as being drawn to a non-elected species. Non-limiting support for the amendments can be found throughout the specification and claims as originally filed. See, *e.g.*, specification as published at paragraphs [0001] and [0017].

Based on the foregoing amendments and the following remarks, the Applicant requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Therefore, claims 1-9, 23-25, 30 and 35 are pending, with claims 10-22, 26-29, and 31-34 being withdrawn from consideration at this time.

B. Indefiniteness Rejection

Claims 2, 3 and 30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for using the limitation "self-entangled starch" (claim 2), "cross-linked starch" (claim 3), and the trademark/trade names Nylon™ and Lyocell™ (claim 30).

The Examiner is taking the position that claim 1 implies that "starch" refers only to natural unmodified starch. Contrary to the Examiner's allegation, claim 1 is generic to the starches to be used and claims 2 and 3 appropriately further define such starches. That is, claims 2 and 3 are proper dependent claims, both of which have antecedent basis when compared with claim 1. Non-limiting support for Applicant's reasoning can be found in paragraph [0036] of Applicant's U.S. published application (US 2007/0179291).

The trademark/trade names Nylon™ and Lyocell™ have been deleted from claim 30.

C. **The Obviousness Rejection Is Overcome**

Claims 1-9, 23, 24, 25, 29, 30 and 35 are rejected under 35 U.S.C. § 103(a) over U.S. Patent 5,997,945 (Shasha *et al.*) in view of E.P. 0 900 807 (Feil).

Regarding U.S. Patent 5,997,945, the Examiner states that Shasha *et al.* discloses (column 10, lines 6-9) formation of adherent granules by mixing starch and anhydrous $CaCl_2$, in a weight percent ratio of starch to water of about 39:1, and allowing water to be absorbed from the air (page 6 of the Action). The Examiner also states that the Shasha *et al.* does not expressly disclose a self-entangled starch (instant claim 2), does not expressly disclose fiber as a co-absorbent material (instant claim 23), and does not expressly disclose a free swell capacity and centrifuge retention capacity (instant claim 35) (page 6 of the Action).

Regarding E.P. 0 900 807, the Examiner states that Feil discloses (column 4, lines 15-20) a water-absorbing polymer comprising cross-linked starch or starch derivative, wherein the particle seize ranges from 100 nm to 1 mm. The Examiner also states that Feil also discloses (column 3, lines 13-15; columns 5-7, examples 1-5 and 7; claim 4) that the starch can be cross-linked with trisodium-trimetaphosphate (page 6 of the Action). Furthermore, the Examiner states that Feil also discloses (column 2, lines 53-58 and column 3, lines 1-12) any native granular starch, physically, enzymatically or chemically modified starch (page 7 of the Action).

Applicant submits that the adherent starch granules disclosed by Shasha are produced with the aim of sustained release of pest control agents. Contrary to the Examiner's allegation, these granules are not designed to be absorbent products. Indeed, the starch component of the granules is selected in relation to adherence (column 15, Table 1 and column 16, Table 2). Shasha states that "*Contact of the granules with water, either preexisting on that surface, or subsequently provided,* ***promotes adherence*** *of the granules to that surface*" (column 15, lines 61-64). A person skilled in the art would not have been inclined to combine the teachings of Feil

with those of Shasha. If anything, a person skilled in the art would have sought references related to the adherence properties of starch containing particles. Finally, Applicant respectfully submits that Shasha is silent with respect to a particulate absorbent comprising an extruded starch network comprising at least 90% (w/w) amylopectin.

Applicant submits that Feil merely teaches a biodegradable, water-absorbing polymer based on starch or derivatives thereof. Applicant respectfully submits that Feil is silent with respect to a particulate absorbent comprising an extruded starch network comprising at least 90% (w/w) amylopectin.

Applicant has surprisingly discovered that a particulate material comprising an extruded starch network comprising at least 90% (w/w) amylopectin provides for excellent absorbent materials. This is corroborated by the FSC and CRC data presented in Tables 3 and 4 of Applicant's U.S. published application (US 2007/0179291).

Solely to further prosecution, Applicant has amended claim 1 such that it is now directed to a particulate absorbent material comprising an "extruded starch network". Applicant submits that Shasha *et al.* and Feil, separately or in combination, fail to disclose an absorbent material comprising an extruded starch network. The starch network of Applicant's particulate material is produced by an extrusion process which, depending on the process (*i.e.*, extrusion) conditions, provides for the formation of either a self-entangled starch network or a cross-linked starch network.

It is a well established fact in the relevant art that extrusion has an impact on the physical characteristics of a starch material. As neither of the cited references discloses an extruded starch product, Applicant submits that the combination of Shasha and Feil fails to disclose or suggest every element of amended claim 1. Even under the Supreme Court's decision in *KSR*, there must be a teaching or suggestion of every element of the claimed invention. Moreover, as

previously mentioned hereinabove, a person skilled in the art would hardly be motivated to supplement the deficiencies of Shasha with the teachings of Feil and *vice versa*. Applicant requests that the current obviousness rejection be withdrawn.

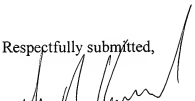
D. Provisional Obviousness-Type Double Patenting Rejections

Given that the obviousness-type double patenting rejections summarized at pages 10-13 of the Action are provisional in nature, Applicant reserves the right to decide at a later time (*e.g.*, upon indication that the current claims are allowable) as to whether it is necessary to file terminal disclaimers.

E. Conclusion

Applicant believes that this is a full and complete response to the Office Action mailed February 26, 2010. A Notice of Allowance is respectfully requested. Should the Examiner have any questions, comments, or suggestions relating to this case, the Examiner is invited to contact Applicant's representative at (512) 536-3020.

Respectfully submitted,



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Date: August 26, 2010